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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,150	02/06/2002	Akihiko Kuriyama	70840/56,950	7499
21874	7590	10/19/2005	EXAMINER	
EDWARDS & ANGELL, LLP P.O. BOX 55874 BOSTON, MA 02205			HERNANDEZ, NELSON D	
			ART UNIT	PAPER NUMBER
			2612	

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/068,150

Applicant(s)

KURIYAMA ET AL.

Examiner

Nelson D. Hernandez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 10 is/are rejected.
- 7) ☒ Claim(s) 2-9 and 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

1. Examiner acknowledges the amendments made on the claims received on July 6, 2005. Claims 1 and 10 have been amended.

### *Specification*

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Ishiguro, US Patent 6,157,018.**

**Regarding claim 1**, Ishiguro discloses an imaging device (Figs. 1-6) comprising: a convex mirror (Fig. 1: 1) for reflecting first incident light representing an object, the convex mirror having a shape of solid of revolution (Conical shape); an optical member (See optical member in fig. 1, 2 and 6) for guiding the first incident light (Figs. 2: a<sub>1</sub> and 6: a<sub>1</sub>) toward the convex mirror and guiding the reflected light toward the imaging mechanism (Figs. 2: 2 and 6: 2), having an attenuation section (Figs. 2: 4 and 6: 4) for the optical member attenuating second incident light (Figs. 2: a<sub>2</sub> and 6: a<sub>2</sub>) which is incident on an outer circumferential surface (Figs: 2: 3 and 6: 3) of the optical member

in an opposite direction to the first incident light passes through the optical member, is reflected by an inner circumferential surface of the optical member so as to be directed toward the convex rotational mirror and is superimposed on the first incident light (Col. 2, line 51 – col. 4, line 35). The claim also recites that the optical member is solid; the word “solid” is defined as a firm or compact in substance, also as not liquid or gaseous. Therefore, Ishiguro discloses that the optical member is solid by disclosing that the cylinder (Shown in figs. 1: 3 and 2: 3) is a composite of transparent glass or plastic (See col. 2, line 65 – col. 3, line 2) (The cylinder as shown in figs. 1-6 is solid).

**Regarding claim 10**, Ishiguro discloses an imaging device (Figs. 1-6), comprising: a convex mirror (Fig. 1: 1) for reflecting first incident light representing an object, the convex mirror having a shape of solid of revolution; an imaging mechanism (Figs. 2: 2 and 6: 2) for taking a reflected image represented by light reflected by the convex mirror; and an optical member (See optical member in fig. 1, 2 and 6) for guiding the first incident light (Figs. 2:  $a_1$  and 6:  $a_1$ ) toward the convex mirror and guiding the reflected light toward the imaging mechanism, the optical member having a light-shielding section (Figs. 2: 4 and 6: 4) for shielding second incident light (Figs. 2:  $a_2$  and 6:  $a_2$ ) which is incident on an outer circumferential surface of the optical member in an opposite direction to the first incident light and passes through the optical member toward an inner circumferential surface of the optical member (Col. 2, line 51 – col. 4, line 35). The claim also recites that the optical member is solid; the word “solid” is defined as a firm or compact in substance, also as not liquid or gaseous. Therefore, Ishiguro discloses that the optical member is solid by disclosing that the cylinder

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(Shown in figs. 1: 3 and 2: 3) is a composite of transparent glass or plastic (See col. 2, line 65 – col. 3, line 2) (The cylinder as shown in figs. 1-6 is solid).

***Allowable Subject Matter***

5. **Claims 2-9 and 11** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

Regarding **claims 2 and 11**, the main reason for indication of allowable subject matter is because the prior art fails to teach or reasonably suggest that the attenuation section is a hole formed in the optical member, and the hole contains an air layer therein having a different light transmittance from that of the optical member so that the second incident light is attenuated by crossing the hole.

Ishiguro discloses an imaging device (Figs. 1-6), comprising: a convex mirror (Fig. 1: 1) for reflecting first incident light representing an object, the convex mirror having a shape of solid of revolution; an imaging mechanism (Figs. 2: 2 and 6: 2) for taking a reflected image represented by light reflected by the convex mirror; and an optical member (See optical member in fig. 1, 2 and 6) for guiding the first incident light (Figs. 2:  $a_1$  and 6:  $a_1$ ) toward the convex mirror and guiding the reflected light toward the imaging mechanism, the optical member having a light-shielding section (Figs. 2: 4 and 6: 4) for shielding second incident light (Figs. 2:  $a_2$  and 6:  $a_2$ ) which is incident on an

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outer circumferential surface of the optical member in an opposite direction to the first incident light and passes through the optical member toward an inner circumferential surface of the optical member (Col. 2, line 51 – col. 4, line 35). The claim also recites that the optical member is solid; the word “solid” is defined as a firm or compact in substance, also as not liquid or gaseous. Therefore, Ishiguro discloses that the optical member is solid by disclosing that the cylinder (Shown in figs. 1: 3 and 2: 3) is a composite of transparent glass or plastic (See col. 2, line 65 – col. 3, line 2) (Glass and plastic are solid materials).

However, Ishiguro fails to teach or reasonably suggest that the attenuation section is a hole formed in the optical member, and the hole contains an air layer therein having a different light transmittance from that of the optical member so that the second incident light is attenuated by crossing the hole.

**Regarding claim 11**, the main reason for indication of allowable subject matter is because the prior art fails to teach or reasonably suggest that the light shielding section is a hole formed in the optical member, and the imaging device further includes a light shielding thin film for shielding the second incident light.

Ishiguro discloses an imaging device (Figs. 1-6), comprising: a convex mirror (Fig. 1: 1) for reflecting first incident light representing an object, the convex mirror having a shape of solid of revolution; an imaging mechanism (Figs. 2: 2 and 6: 2) for taking a reflected image represented by light reflected by the convex mirror; and an optical member (See optical member in fig. 1, 2 and 6) for guiding the first incident light (Figs. 2:  $a_1$  and 6:  $a_1$ ) toward the convex mirror and guiding the reflected light toward the

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imaging mechanism, the optical member having a light-shielding section (Figs. 2: 4 and 6: 4) for shielding second incident light (Figs. 2:  $a_2$  and 6:  $a_2$ ) which is incident on an outer circumferential surface of the optical member in an opposite direction to the first incident light and passes through the optical member toward an inner circumferential surface of the optical member (Col. 2, line 51 – col. 4, line 35). The claim also recites that the optical member is solid; the word “solid” is defined as a firm or compact in substance, also as not liquid or gaseous. Therefore, Ishiguro discloses that the optical member is solid by disclosing that the cylinder (Shown in figs. 1: 3 and 2: 3) is a composite of transparent glass or plastic (See col. 2, line 65 – col. 3, line 2) (Glass and plastic are solid materials).

However, Ishiguro fails to teach or reasonably suggest that the light shielding section is a hole formed in the optical member, and the imaging device further includes a light shielding thin film for shielding the second incident light.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

**Contact**


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson D. Hernandez whose telephone number is (571) 272-7311. The examiner can normally be reached on 8:30 A.M. to 6:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc Yen Vu can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nelson D. Hernandez  
Examiner  
Art Unit 2612

NDHH  
October 5, 2005

  
NGOC-YEN VU  
PRIMARY EXAMINER